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**AMENDMENTS TO THE CLAIMS**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (original) A method for forming a non-silicon metalloid-oxane and metallo-oxane, or mixed poly(silicon/metallo)oxane polymer networks, or their hydrido, organic, or organometallic derivatives, comprising condensing an alkoxide substrate with another alkoxide material at neutral or near neutral pH using a catalyst comprising a molecule having a nucleophilic group that displaces alkanol from said alkoxide substrate facilitating solvolysis to initiate structure-directed condensation with said another alkoxide, wherein either or both of said alkoxides is selected from the group consisting of organosilicon alkoxides; hydrido-silicon alkoxides; metallo alkoxides; organometallo-alkoxides; hydrido metallo-alkoxides; metalloid alkoxides; organometalloid alkoxides; and hydrido metalloid alkoxides.
2. (original) The method of Claim 1 wherein said structure-directed condensation is by nucleophilic attack.
3. (original) The method of Claim 1 wherein said nucleophilic group forms a transitory intermediate in facilitating solvolysis.
4. (original) The method of Claim 3 wherein said transitory intermediate is covalent.
5. (original) The method of Claim 1 comprising using a group that interacts with said nucleophilic group to increase its nucleophilicity.
6. (original) The method of Claim 5 wherein said interaction is by hydrogen bonding.